ABSTRACT

Improved methods for transferring a gene into target cells by using a retrovirus, wherein the gene transfer efficiency is improved and the target cells are efficiently transformed by binding the retrovirus to a functional substance which is immobilized on as carrier and having an activity of binding to retroviruses followed by washing; using an antibody capable of specifically recognizing cells, laminin or mannose-rich type sugar chain as a substance having an activity of binding to the target cells; pre-treating the target cells so as to inactivate transferrin receptor, or introducing a new functional group into the functional substance.